

**ABSTRACT OF THE DISCLOSURE**

Electrochemical transducer arrays are already known from the prior art. According to the invention, the transducer array is provided with at least one flexible, planar metal substrate on which at least one flexible insulator having a firm connection between the metal surface and the insulator surface is disposed. The metal substrate and the insulator disposed thereon are structured in such a manner as to give metal areas which are electrically insulated the one from the other and which serve as sensor areas. The metal substrate used is self-contained so that the structured metal areas can be contacted from the lower side.